

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>PARA 49775</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 01/47019</b>	International filing date (day/month/year) <b>10/12/2001</b>	(Earliest) Priority Date (day/month/year) <b>12/12/2000</b>
Applicant <b>PARATEK MICROWAVE, INC.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1  
☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/47019

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H01P1/203 H01P1/213

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01P H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 935 910 A (DAS SATYENDRANATH) 10 August 1999 (1999-08-10) column 5, line 49 -column 6, line 44; figures 5,6	1,2,6-9, 13
Y		3-5, 10-12, 14,15, 17-19
Y	WO 00 35042 A (PARATEK MICROWAVE INC) 15 June 2000 (2000-06-15) page 4, line 24 -page 6, line 14 page 11, line 29 -page 12, line 2; figures 2,13	3-5, 10-12
A		16

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

**\* Special categories of cited documents :**

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

7 March 2002

Date of mailing of the international search report

22/03/2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Den Otter A

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/47019

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 09, 31 July 1998 (1998-07-31) -& JP 10 098348 A (HITACHI METALS LTD), 14 April 1998 (1998-04-14) abstract; figures 1,7 ----	14, 15, 17-20
Y	US 5 721 521 A (DRABECK LAWRENCE MILTON ET AL) 24 February 1998 (1998-02-24) column 1, line 25-31; figure 2 ----	20
A	VENDIK O G ET AL: "FERROELECTRIC TUNING OF PLANAR AND BULK MICROWAVE DEVICES" JOURNAL OF SUPERCONDUCTIVITY, PLENUM PUBLISHING CO, NEW YORK, US, vol. 12, no. 2, April 1999 (1999-04), pages 325-338, XP001011396 page 337, left-hand column, line 47 -right-hand column, line 3; figures 1A,B ----	1,3-5, 10-12, 14,16
A	US 5 908 811 A (DAS SATYENDRANATH) 1 June 1999 (1999-06-01) cited in the application column 3, line 6 -column 4, line 10; figures 1,2 ----	1,14;20
A	M MEHDIZADEH ET AL.: "HIGH SPEED VARACTOR TUNED NOTCH FILTER" IEEE-MTT-S INTERNATIONAL MICROWAVE SYMPOSIUM - DIGEST, 4 - 6 June 1985, pages 531-534, XP002192388 St. Louis (US) figure 1 ----	1,14
A	US 4 963 945 A (COOPER DAVID M ET AL) 16 October 1990 (1990-10-16) the whole document -----	20

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/47019

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5935910	A	10-08-1999	US 5496795 A	05-03-1996
WO 0035042	A	15-06-2000	AU 1843400 A	26-06-2000
			CN 1329762 T	02-01-2002
			EP 1145362 A1	17-10-2001
			WO 0035042 A1	15-06-2000
JP 10098348	A	14-04-1998	EP 0793289 A1	03-09-1997
			US 5880649 A	09-03-1999
US 5721521	A	24-02-1998	NONE	
US 5908811	A	01-06-1999	NONE	
US 4963945	A	16-10-1990	AU 4407089 A	05-11-1990
			CA 1317649 A1	11-05-1993
			DE 68907613 D1	19-08-1993
			DE 68907613 T2	03-03-1994
			EP 0466689 A1	22-01-1992
			ES 2017042 A6	16-12-1990
			IL 92251 A	21-02-1993
			JP 6054882 B	20-07-1994
			JP 4500749 T	06-02-1992
			NO 913909 A	04-10-1991
			WO 9012429 A1	18-10-1990